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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,002	02/16/2001	Leo Driessen	CS1089#SP	3636

7590 09/12/2003
The Black & Decker Corporation
701 East Joppa Road
Towson, MD 21286

EXAMINER

TRAN, LOUIS B

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 09/12/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,002

Applicant(s)

DRIESSEN, LEO

Examiner

Louis B Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. This action is in response to applicant's amendment, Paper No. 13, received on 07/11/2003. Applicant's cancellation of claims 5 and 17 in Paper No. 12 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Curtiss (4,274,304) in further view of applicant's admitted prior art.

Van Laere discloses the invention substantially as claimed including a power tool comprising a body which houses a motor, and a first output shaft 5 operatively coupled to the motor and an attachment for engagement with the body seen in Figure 38, wherein the attachment includes an input shaft 175 for operative engagement with the first output shaft 5 of the body when the attachment is engaged with the body, and wherein the attachment includes a further output shaft 222 for transmitting rotational motion derived from rotational motion of the attachment input shaft 175, the power tool characterized by both the body and the attachment having a respective gear mechanism 13, 216, 220 for causing a fixed gear change in rotation speed as between the input and the output of the respective gear mechanism, the combination of the body

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the attachment thereby providing a power tool with a plurality of serially coupled gear mechanisms as described in column 20, lines 35-50 and column 36, lines 55-68 (as in claim 1), wherein the gear mechanism 13 of the body is between the motor and the first output shaft 5 (as in claim 2), wherein the gear mechanism of the attachment is between the attachment input shaft and the further output shaft as seen in Figure 38 (as in claim 3), wherein the ratio of the input rotational speed to output rotational speed for each respective gear mechanism is fixed (as in claim 4), wherein the attachment is releasably engageable with the body (as in claim 7), a tool including a plurality of attachments, each one of which may operatively engage with the body (as in claim 8), wherein the gear mechanism of the body is operable to change a rotational ration from the motor to the output shaft of the body (as in claim 9), wherein the gear mechanism of the attachment is operative for changing a rotational ratio from the output shaft of the body to an output of the attachment (as in claim 10), but does not explicitly show an epicyclic gearbox for each gearing mechanism (as in claim 1).

However, Curtiss teaches the use of an epicyclic gear box with a motor and tool attachment arrangement as in column 2, lines 18-45 for the purpose of compact lightweight design as in column 2, lines 45-60.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Van Laere with an epicyclic gear box in order for compact and lightweight design as is commonly practiced in the art.

Furthermore, applicant has stated on page 57 lines 7-11, that those skilled in the art would recognize the use of an epicyclic gear reduction mechanism is standard

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practice, therefore, the epicyclic gear reduction mechanism is not described in detail in the specification.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Curtiss (4,274,304) in view of applicant's admitted prior art in further view of Kress et al. (4,103,511).

Van Laere discloses the invention substantially as claimed including the above but does not explicitly show wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other.

However, Kress et al. teaches a tool wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other as seen in Figure 1 and 2 for the purpose of centering the corresponding attachment as described in column 4, lines 40-55.

Therefore, it would have been obvious to one having ordinary skill in the art to provide a splined connection to Van Laere in order to achieve improved centering.

5. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Curtiss (4,274,304) in further view of applicant's admitted prior art.

Van Laere discloses the invention substantially as claimed including a power tool comprising a body having a motor disposed therein, an attachment adapted to be selectively fixed to the body, a first gear arrangement 13 disposed within the body, the first gear arrangement operative for non-adjustably changing a rotational ratio from the motor to an output of the body and a second gear arrangement 216,220 disposed within

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the attachment, the second gear arrangement engaging and driven by the first gear arrangement when the attachment is fixed to the body, the second gear arrangement operative for non-adjustably changing a rotational ratio from the output of the body to an output of the attachment as seen in Figure 38 and 1 (as in claim 11), wherein the body includes an output shaft 5 driven by the motor, the output shaft being controlled by the first gear arrangement 13 (as in claim 12), wherein the output shaft is operable to engage an input shaft disposed within the attachment (as in claim 13), wherein the input shaft is controlled by the second gear arrangement (as in claim 14), wherein the first gear arrangement and the second gear arrangement cooperate to mediate the rotational speed of the power tool (as in claim 15), wherein the first gear arrangement is disposed between the motor and the attachment (as in claim 16), but does not explicitly show an epicyclic gearbox for each gearing mechanism (as in claim 11).

However, Curtiss teaches the use of an epicyclic gearbox with a motor and tool attachment arrangement as in column 2, lines 18-45 for the purpose of compact lightweight design as in column 2, lines 45-60.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Van Laere with an epicyclic gearbox in order for compact and lightweight design as is commonly practiced in the art.

Furthermore, applicant has stated on page 57 lines 7-11, that those skilled in the art would recognize the use of an epicyclic gear reduction mechanism is standard practice, therefore, the epicyclic gear reduction mechanism is not described in detail in the specification.

Conclusion


6. Applicant's remarks have been fully considered but are deemed moot in view of the new grounds of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

lbt



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700